

WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, W. F. McDONALD in charge]

NORTH ATLANTIC OCEAN

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Atmospheric pressure.—The mean pressure during January 1934 over the North Atlantic was mainly above normal, but was distinctly below normal over the north-eastern portion. Reykjavik, Iceland, averaged almost a quarter inch below normal, but the lowest reading reported there (28.40 inches, on the 12th) was not remarkable for the winter season at that station. At Lisbon and Madeira the mean pressure was two tenths of an inch above normal.

The Atlantic HIGH was not well developed during the first few days, but became more conspicuous later, especially about the 7th and 20th and again in midocean and to the eastward during the last few days. This HIGH at greatest extent is illustrated on chart VIII, for January 7.

TABLE I.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, January 1934

Stations	Average pressure	Departure	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Julianehaab, Greenland...	29.31		29.96	17	28.82	20
Reykjavik, Iceland.....	29.22	−0.24	30.57	31	28.40	12
Lerwick, Shetland Islands..	29.61	−.09	30.53	31	28.43	18
Valencia, Ireland.....	29.97	+ .07	30.81	31	29.12	14
Lisbon, Portugal.....	30.36	+ .21	30.55	20	30.15	30
Madeira.....	30.31	+ .21	30.59	22	29.93	31
Horta, Azores.....	30.24	+ .08	30.49	31	29.85	10
Belle Isle, Newfoundland..	29.85	+ .05	30.30	4	29.20	26
Halifax, Nova Scotia.....	30.01	+ .03	30.64	4, 22	28.88	29
Nantucket.....	30.06	+ .02	30.63	4	29.06	28
Hatteras.....	30.16	+ .02	30.50	31	29.41	28
Bermuda.....	30.13	− .03	30.38	6, 7	29.70	29
Turks Island.....	30.07	+ .02	30.14	7, 8	30.00	3, 29
Key West.....	30.10	− .00	30.26	18	29.93	29
New Orleans.....	30.16	+ .03	30.45	30	29.79	31
Cape Gracias, Nicaragua...	29.94	− .01	29.98	11, 12, 27, 28	29.82	22

NOTE.—All data based on a.m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

Cyclones and gales.—Cyclonic storms occurred in large number and some were of notable violence. However, the first week of the month was comparatively free from gales save a few near midocean, and the final week likewise yielded few gale reports except from the vicinity of the American coast and from far-northern waters.

High pressure was well developed across the breadth of the Atlantic about the 7th, but within a few days thereafter the deepest depression of the month was noted, being most intense when central about 700 miles to west-northwest of the northern tip of Ireland. (See charts VIII and IX.)

In connection with this LOW the minimum pressure reading so far reported during the month was recorded by the American steamship *Cold Harbor*, at noon of the 11th, about latitude 58° N. and longitude 28° W. This reading, 27.80 inches, was considerably lower than any reported thus far by a shore station adjacent to North Atlantic waters.

Two days before the lowest pressure was encountered by the *Cold Harbor* the same depression had caused the first gale of hurricane force noted during 1934 in the Atlantic, the German liner *Europa*, bound from New York to the English Channel, experiencing force 12 about 8 p.m. of the 9th, when near latitude 46° N., longitude 39° W. The gale continued along the course of the steamer for almost 40 hours after the time of greatest strength.

There was no day during January, with the single exception of New Year's Day, when gale force was not encountered at some point in the North Atlantic, and for almost a fortnight after the 11th gales were experienced with special frequency along the main northern steamship routes, but for the most part to the eastward of the fifty-fifth meridian. Nevertheless, there was no storm that rated greater than a whole gale between the 14th and 19th, inclusive.

The second North Atlantic report of hurricane force was, like the first, from the *Europa*, this time bound from Cherbourg to New York. This storm was encountered during the night of the 22–23d, the lowest barometer being noted about latitude 47° N., longitude 37° W. This intense wind was connected with a LOW which passed eastward near Newfoundland during the 19th and 20th, and for a few days afterward formed a southward extension of a large LOW over the Greenland-Iceland area, but about noon of the 22d developed marked intensity near the fortieth meridian; during the remainder of that day and the 23d it advanced eastward near the chief steamer lanes, retaining great strength; but by the morning of the 24th it had decreased somewhat and traveled north-northeastward to the region between Iceland and the Faroe Islands.

Late on the 28th a vigorous storm from south-central Canada reached the Gulf of St. Lawrence, whence it turned sharply northward to southern Baffin Land by the evening of the 30th. In connection with this storm several vessels to westward of the fiftieth meridian, but all north of the latitude of Bermuda, reported fresh to whole gales on the 28th or 29th. The third and last report of hurricane violence came in connection with this storm. The American steamship *President Van Buren*, bound from the Mediterranean to Boston, experienced force 12 about 1 p.m. of the 29th, when approximately 150 miles southeast of Cape Cod.

Fog.—Fog was in general less prevalent than usual for January, and the eastern half of the Atlantic to southward of the fiftieth parallel was practically free from fog, but to northward it was sometimes reported on one or two of the last few days of the month. Over the Grand Banks fog occurred on 3 to 5 days, and on 3 to 7 days near the coast between the Gulf of St. Lawrence and Cape Hatteras, where the period of several days about the 6th was especially foggy. New York harbor was fog-bound from the 5th to 7th, inclusive. There were a very few reports of fog on scattered dates in areas adjacent to the Gulf and South Atlantic coasts.